

Amendment dated December 8, 2003
Reply to Office Action of August 8, 2003
Application No.: 09/895,435
Applicants : Francis A. Stewart, Youming Zhang and Bernard Hallet
Filed : June 30, 2001
Title : A NEW TYROSINE RECOMBINASE FOR GENETIC ENGINEERING
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AMENDMENTS TO THE CLAIMS

Please enter the following claim amendments, where additions are underlined and deletions are struckthrough.

1 (original): A composition comprising an isolated DNA molecule comprising one or more copies of TRT (SEQ ID NO:3), or a functional variant thereof, with the proviso that the DNA molecule does not comprise the entire sequence of TRT" (SEQ ID NO:4).

2 (original): The composition of claim 1 wherein the DNA molecule comprises one or more copies of TRT (SEQ ID NO:3), or a functional variant thereof, and a heterologous nucleotide sequence.

3 (original): The composition of claim 1 wherein the DNA molecule comprises one or more copies of TRT (SEQ ID NO:3), or a functional variant thereof, with the proviso that the DNA molecule does not comprise more than 200 contiguous nucleotides of the sequence TRT" (SEQ ID NO:4).

4 (original): The composition of claim 3 wherein the DNA molecule does not comprise more than 100 contiguous nucleotides of TRT" (SEQ ID NO:4).

5 (original): The composition of claim 3 wherein the DNA molecule does not comprise more than 32 contiguous nucleotides of TRT" (SEQ ID NO:4).

6-10 (canceled)

11 (currently amended): The composition of any one of claims 1 to ~~10~~5 wherein the DNA molecule further comprises a selectable marker.

12 (currently amended): The composition of any one of claims 1 to ~~10~~5 wherein the DNA molecule is a vector.

13 (original): A cell transformed with a DNA molecule, said DNA molecule comprising one or more copies of TRT (SEQ ID NO:3) or a functional variant thereof,

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with the proviso that the DNA molecule does not comprise the entire sequence of TRT" (SEQ ID NO:4).

14 (canceled)

15 (currently amended): The cell of claim 13 ~~or 14~~ wherein the DNA molecule is integrated into the chromosome of the cell.

16 (original): A eukaryotic cell transformed with a DNA molecule integrated into its chromosome, said DNA molecule comprising one or more copies of TRT (SEQ ID NO:3) or a functional variant thereof, or TRT' (SEQ ID NO:2), or a functional variant thereof.

17 (original): The cell of claim 16, which is a mouse embryonic stem cell.

18 (currently amended): The cell of claim 16 wherein the DNA molecule comprises two copies of TRT["] (SEQ ID NO:3), or a functional variant thereof, separated by a heterologous nucleotide sequence.

19 (original): The cell of claim 16 wherein the DNA molecule comprises two copies of TRT' (SEQ ID NO:2), or a functional variant thereof, separated by a heterologous nucleotide sequence.

20 (original): A kit comprising in one or more containers:

a) an isolated DNA molecule comprising one or more copies of TRT (SEQ ID NO:3) or a functional variant thereof; and

b) an isolated TnpI protein, a TnpI expression vector or a cell capable of expression TnpI.

21-52 (canceled)

53 (new): The composition of claim 1, wherein the isolated DNA molecule comprises one or more copies of TRT (SEQ ID NO:3).

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54 (new): The composition of claim 1, wherein the isolated DNA molecule comprises a sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10.

55 (new): The composition of claim 1, wherein the isolated DNA molecule comprises TRT' (SEQ ID NO:2).

56 (new): The composition of claim 1, wherein the isolated DNA molecule comprises at least two copies of TRT (SEQ ID NO:3).

57 (new): The composition of claim 1, wherein the isolated DNA molecule comprises at least two copies of TRT' (SEQ ID NO:2).

58 (new): The cell of claim 13, wherein the DNA molecule comprises one or more copies of TRT (SEQ ID NO:3).

59 (new): The cell of claim 13, wherein the DNA molecule comprises a sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10.

60 (new): The cell of claim 13, wherein the DNA molecule comprises TRT' (SEQ ID NO:2).

61 (new): The cell of claim 13, wherein the DNA molecule comprises at least two copies of TRT (SEQ ID NO:3).

62 (new): The cell of claim 13, wherein the DNA molecule comprises at least two copies of TRT' (SEQ ID NO:2).

63 (new): The kit of claim 20, wherein the isolated DNA molecule comprises one or more copies of TRT (SEQ ID NO:3).

64 (new): The kit of claim 20, wherein the isolated DNA molecule comprises a sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:8, SEQ ID

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NO:9, and SEQ ID NO:10.

65 (new): The kit of claim 20, wherein the isolated DNA molecule comprises TRT' (SEQ ID NO:2).

66 (new): The kit of claim 20, wherein the isolated DNA molecule comprises at least two copies of TRT (SEQ ID NO:3).

67 (new): The kit of claim 20, wherein the isolated DNA molecule comprises at least two copies of TRT' (SEQ ID NO:2).